VOL. XL NO. 1



ATLANTIC INTERNATIONAL CHAPTER OF THE AMERICAN FISHERIES SOCIETY

### **President's message**

by Graham Goulette NOAA fisheries graham.goulette@noaa.gov



Greetings fellow AIC members! I hope you've all had a successful winter while being able to enjoy all our region has to offer during the season of snow and ice. Field work is fairly limited for me during the winter, so any chance I can get to drill some holes in the ice I'll take it! Fortunately I had the opportunity to take my five year old daughter Ava and two year old son Finnegan out fishing on several occasions. Usually obtaining minimal success each time, but relishing the moments none the less. It is truly enjoyable for me to see my youngsters engage in and appreciate our region's natural resources.

The 38th AIC annual meeting held at Quimby Country in Vermont was a great time. Jud Kratzer of Vermont Fish and Wildlife, in addition to assuming the past-president position tackled the arrangement responsibilities and put together a great package. The meeting offered a nice variety of oral presentations, social events and an extremely lucrative raffle and silent auction (thanks Shawn Good)! Michael Bailey of the USFWS accepted the vice president's role and yes, once again John Magee of New Hampshire Fish and Game benevolently accepted the secretary/treasurer's role. Attendance was average but for those who made the trip we enjoyed some beautiful scenery and autumn foliage in the Northeast Kingdom of Vermont while networking with friendly faces. Unfortunately we didn't have any students take advantage of the stipend AIC makes available to student presenters. Annually the AIC will award up to ten stipends of \$200, covering a large portion of the annual meeting cost; to obtain more information contact Christine Lipsky (Christine.Lipsky@noaa.gov).

The 39th annual AIC meeting will be held in Downeast Maine September 2013 and our arrangements committee is presently working out the details to hold the meeting at the Schoodic Education and Research Center (http://www.sercinstitute.org). What a great opportunity to share findings from current research and network with colleagues from our region while enjoying some of Maine's beautiful coastline. Tentatively the meeting is being scheduled for September 22nd – 24th. In the nearer future, April 7th – 9th, the Northeast Division will be holding its annual meeting in conjunction with the Northeast Association of Fish and Wildlife Agencies at the Saratoga Hilton in Saratoga Springs, NY. I am planning to attend and hope to see some of our chapter members there. For those who may be unaware, the NED provides up to five stipends for students to attend this annual meeting. Also, for those of you interested or if you know someone who may be interested, the NED will be accepting nominations for the vice president position this spring. For more information on either topic you may contact Phil Downey (pdowney@aquatecb.com). Then, of course there will be the 143rd annual AFS meetings next September in Little Rock, AR; abstracts are due March 15th so if you plan to attend and give a presentation make sure to submit your abstract.



Well, it won't be long before the spring field season arrives. While you're conducting research or working on a special project, whether it's field or lab related, think about sharing your findings at the next AIC annual meeting. After all, facilitating the exchange of fisheries related ideas and information is what the society is all about.



#### PRESIDENT

Graham Goulette **Fishery Biologist** NOAA-Fisheries - Maine Field Station 17 Godfrey Drive, Suite 1 Orono, Maine 04473 Phone: (207) 866-7378 FAX: (207) 866-7342 Graham.Goulette@noaa.gov

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### **Upcoming events & meetings in** fisheries sciences

### FIRST CALL FOR ABSTRACTS - 39TH ANNUAL MEETING OF THE ATLANTIC

INTERNATIONAL CHAPTER OF THE

#### AMERICAN FISHERIES SOCIETY

### September 22-24, 2013

Schoodic Education and Research Center Maine

The Atlantic International Chapter of the American Fisheries Society is pleased to announce its first call for oral and poster presentations at the 39th annual meeting! AIC is a great place to present new research and exciting findings.

The deadline will be August 16th, 2013 and electronic submittals will be set up in the future.

Come, smell the salt air! The 2013 annual Atlantic International Chapter meeting will be held in Downeast Maine this September at the Schoodic Education and Research Center (http:// www.sercinstitute.org). This is a great opportunity to share findings from current research and network with colleagues from our region while enjoying some of Maine's picturesque coastline. The meeting is tentatively planned for September 22nd - 24th and will provide an informal session and social, technical sessions and our annual business meeting. We welcome both AIC members and nonmembers in what should be a very successful meeting. If you have questions please do not hesitate to contact michael\_bailey@fws.gov.

### 2013 AWRA SUMMER SPECIALTY CONFERENCE - ENVIRONMENTAL FLOWS

### June 24-25, 2013 Hartford, CT

An AWRA Summer Specialty Conference on Environmental Flows will be held in

Hartford, Connecticut,

**Environmental Flows** June 24-25, 2013 - Hariford Hilton Hartford Hotel

2013 AWRA Summer Specialty Conference

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on June 24-25, 2013. Environmental flows, also called ecological or instream flows, are defined as "the quantity, quality, and timing of water flows required to sustain freshwater ecosystems, human livelihoods, and the well-being of those who depend on them." The objective of the conference is to offer a professional forum on the latest issues concerning the research, policy, and application of establishing environmental flows. The conference topics will be of particular interest to scientists, policy makers and regulators, consultants and stakeholders practicing in the environmental flows arena or affected by changes in flow policy water management requirements. Themes are intended to address issues experienced by those practicing in the environmental flows arena or affected by changes in flow policy water management requirements.

On Wednesday, June 26, attendees can join a special field trip to nearby Barkhamsted Reservoir, which provides water to Hartford and the surrounding region, and where the Hartford Metropolitan District has launched forest management and source protection programs. The field trip will also include a lecture tour and reception at Great Mountain Forest, which hosts research on forest ecosystem management. These are places you cannot easily visit on your own and where there are great programs using sustainable forest practices to protect water resources for water supply and aquatic communities. Stops will also be made along the Connecticut River to learn of actions being taken to manage reservoir releases and environmental flows.

For more information visit: http://www.awra.org/meetings/EnvironmentalFlows2013/





### SPECIES IDENTIFICATION AND ASSESSMENT OF NORTHERN FRESHWATER FISH ASSEMBLAGES

### June 16-22 Eagle Hill Institute Steuben, ME

Freshwater fish in the northeastern United States number over 150 species, inclusive of native and introduced forms, resident to ponded and flowing waters of varying habitats and water quality. Sportfish species (trout, salmon, bass, pike and perch) are most recognizable, while many of the vast minnow (one-third of the fish fauna) and non-game species are more difficult to identify, particularly in the field. This seminar will focus on the taxonomy and field/ laboratory identification of 28 freshwater fish families, inclusive of diadromous (migratory) species. Through lectures, actual field sampling (minnow trapping, beach seining, and backpack electrofishing), examination of fresh and preserved-aquarium specimens and use of technical keys, participants will gain an under-standing of the taxonomy, morphology, and ecology of freshwater fish. Fish origins, distributions and conservation status will be emphasized and development of Indices of Biotic Integrity (IBI) and the Biological Condition Gradient (BCG) reviewed, as well as an introduction to pre-Columbian fish remains found at Maine archaeological sites. A listing of historical and current scientific literature will also be provided. This seminar will be of great interest to aquatic-wildlife-conservation biologists-scientists, environmental consultants, natural historians and others who wish to learn more about freshwater fish and resident fish species assemblages.

Dave Halliwell (david.halliwell@maine.gov) received his Ph.D. in Fishery Biology from the University of Massachusetts, Amherst, specializing in fish conservation, aquatic habitat classification, and vertebrate taxonomy. He has been employed as an Aquatic Biologist with Maine DEP (Augusta) since 1999. Dave has spent over three decades identifying and investigating the habitats of freshwater fishes while working with northeastern State and Federal fish and water quality agencies and has considerable experience teaching University and field courses related to New England fish and wildlife. Related interests include pre-Columbian indigenous fish (archaeological) studies, aquatic habitat restoration, hydropower-flow issues, reservoir water levels, lake water quality assessment and fish zoogeographic studies. Dr. Halliwell is a co-author of the Inland Fishes of Massachusetts (2002). All participants will be provided with a comprehensive course notebook and study guide (\$35 fee). Inland Fishes of Massachusetts is currently out of print, however, multiple classroom copies will be available.

Apply on-line: http://www.eaglehill.us/programs/general/application-web.shtml

Application and Cost Information: http://www.eaglehill.us/programs/general/application-info.shtml

### Fore more information, please contact:

Anne Favolise (anne@eaglehill.us), 207-546-2821

### FIRST ANNOUNCEMENT: 'WHAT WORKS? A WORKSHOP ON WILD ATLANTIC SALMON RECOVERY PROGRAMS'

### September 18-19, 2013 The Wilfred M. Carter Atlantic Salmon Interpretive Centre St. Andrews, New Brunswick, Canada

The Atlantic Salmon Federation is hosting a workshop to bring together stakeholder groups, scientists, and managers to collate data on Atlantic salmon recovery programs in Eastern North America. Case studies will provide examples of successes, failures, and best practices for rebuilding depleted and threatened wild salmon populations. Outcomes of this workshop will be: 1) a classification system for salmon recovery and rebuilding programs that identify population status and associated threats, life history attributes, action plans, program goals, and metrics for evaluating the success of recovery programs, and 2) recommendations on appropriate recovery strategies for Atlantic salmon based on using the knowledge shared at the workshop.

#### Keynote speakers:



DR. IAN FLEMING Memorial University The ecology and genetics of salmon recovery: what is success?

Dr. Fleming is a Professor in the Department of Ocean Sciences of Memorial University and its former Director (2004-2009). His research integrates perspectives from evolutionary ecology with fishery and conservation biology. He has worked extensively on the management and conservation of wild fish populations including the restoration of endangered and threatened populations. Ian has published widely



### DR. JAMIE GIBSON

Fisheries and Oceans Canada The role of population dynamics in the recovery planning for Atlantic salmon

Dr. Gibson is a research scientist with Fisheries and Oceans Canada. He leads the Population and Ecological Modeling Unit in DFO's Maritimes Region, and formerly led the Diadromous Fish Research Unit. He has over 35 years of experience in aquatic ecology, and much of his recent research has been focused on recovery planning for endangered fish populations. Jamie has published widely and his interests include modeling the dynamics of fish populations and the effects of human activities on freshwater ecosystems and fish communities.

More details on registration and program agenda will be available soon.

If you have any questions regarding the workshop, please contact conference organizer: Jonathan Carr: jcarr@asf.ca; phone 506-529-1385

2013 New England Lakes Conference Announcement

## LAKES

Mirrors of Our Past . . . Lenses to Our Future

### June 7-8, 2013

Hosted by Saint Joseph's College Along the shores of Sebago Lake in Standish Maine

### Sponsored by NEC-NALMS

New England Chapter/Affiliate to the North American Lake Management Society

### Friday

Afternoon workshops and lake trips Evening on-lake dinner & entertainment

### Saturday

Morning plenary session Lobster bake luncheon Afternoon oral presentations

### PLEASE SAVE THE DATE!

Call for papers in early 2013

Photo of Frye's Leap, Sebago Lake, Maine, by John Manoush

### Restoring a Historic Log Driven Stream in Maine

### By Ray Ary

Senior Wildlife Biologist, Plum Creek Maine Fairfield, ME

Historically, many Maine streams were used to transport logs from the woods to mills. To increase the efficiency of moving the logs, boulders and in-stream logs were removed, stream channels were straightened and side channels blocked. These operations degraded trout habitat by decreasing pool diversity, removing in-stream structures and cover elements, and altering substrate composition. Intervale Brook is located in Frenchtown Township near Moosehead Lake and is a historic log driven stream that shows evidence of channelization. The splash dam used in the log drives is still present in the headwaters of the stream and remains a barrier to fish passage.

Plum Creek along with the Maine Department of Inland Fisheries and Wildlife, Maine Forest Service, and Forest Society of Maine identified Intervale Brook as a good candidate for stream restoration. After surveying approximately 3.5 miles of the stream, a plan was formed to open several blocked side channels, add in-stream wood and boulders where possible, and remove the splash dam over a two-year period. We started in the fall of 2012 by opening up 8 side channels, placing several boulders back into the main stream channel from the banks and adding some key pieces of in-stream wood. In the fall of 2013, we plan on adding more in-stream wood and then finish by removing the splash dam. The stream will be monitored using standard surveys estimating fish community composition, monitor habitat and water quality, and assess geomorphic stability for four consecutive years and this data will be compatible for comparisons and analyses from similar stream enhancement projects for continued statewide evaluation of wood addition techniques.

This project is a great example of how collaborations between state agencies and willing private landowners like Plum Creek can benefit public resources while being good stewards of the land. In the future, additional streams on Plum Creek's ownership will be assessed to identify other candidate streams for restoration and enhancement as partnership projects.





#### Photo credits:

Above: Key piece of wood placed during 1st phase of project. Left: Remnant splash dam to be removed during 2nd phase of project.

### **New Hampshire Fish Chief Retires**

#### **By Scott Decker**

New Hampshire Fish and Game Concord, NH

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New Hampshire Fish and Game Department Inland Fisheries Chief, Steve Perry, retired January 24th after 35 years with the Department. After graduating from Michigan State University with a BS in Fisheries, Steve began his career as a fish culturist in 1978 at the New Hampton State Fish Hatchery. In 1980, Steve was promoted to Fisheries Biologist I and was put in charge of fin fish studies as part of a coastal environmental impact study in the estuary of Great Bay. In 1986, Steve advanced to Fisheries Biologist II and worked primarily on coldwater fisheries research projects including, statewide stream inventory and classification, forage fish research and management, and lake trout and landlocked salmon management. He was instrumental in getting a Commission policy established that recognized the highest and best use of rainbow smelt in our large lakes was as forage for salmon and trout and not as a commercial species. From 1992-1997, Steve served as a Regional Supervisor, managing staff in two regional offices at one point while still conducting field work.

Steve became Chief of Inland Fisheries in 1997 where he initiated quality and wild trout management programs, and was recognized for his efforts by Trout Unlimited, receiving TU's Silver Trout Award in 1998. He also developed the state's first fisheries habitat program for New Hampshire as well as being instrumental in hiring staff to complete the aquatics portion of the NH Wildlife Action Plan. During his time as Fish Chief, Steve volunteered for leadership positions at regional and national levels, including chairing the Eastern Brook Trout Joint Venture steering committee, chairing several National Fish Habitat Partnership committees, serving on committees for the Recreational Boating and Fishing Foundation as well as the Sport Fishing and Boating Partnership Council. Steve also became the first, and so far only, National Conservation Leadership Fellow in NH and lead Fish and Game's "Agency Change Initiative," which recognized the need to adapt to the Department's changing constituency.

Steve also served AFS as a member of the Atlantic International Chapter Excomm (1989-1990) as Vice-President and President and also as Fisheries Program Chair for the Northeastern Division (1999). Although he is retiring from state service and will be sorely missed by staff and colleagues, Steve will still be engaged in fisheries issues as he accepted a position as the Coordinator of the Eastern Brook Trout Joint Venture. Steve can be reached at ebtjv.coordinator@gmail.com



# The definitive scientific resource on the ecology, history, and management of the northern pike

### By Rodney B. Pierce

Minnesota Department of Natural Resources University of Minnesota Press | 224 pages | 2012 ISBN 978-0-8166-7954-6 | cloth | \$40.00



Based on research in Minnesota by leading pike specialist Rodney B. Pierce, Northern Pike is the most complete collection of information to date on the species, for everyone from scientists and conservation biologists to general readers and recreational anglers. Pierce's study synthesizes the long history of northern pike management, describing recent efforts to better understand and manage this renowned species.

### PRAISE FOR NORTHERN PIKE

"Rodney B. Pierce has successfully tackled the job of documenting Minnesota's pike management history in the background of the most relevant science. This will be required reading for all the fish biologists who are involved in northern pike management."

Paul Cunningham, Wisconsin Department of Natural Resources

"Pierce blends interesting information about the ecology, history of fishing, and the historical and current management of northern pike. Avid fisherman will find it a delightful reading experience."

Bruce Vondracek, University of Minnesota

### **ABOUT THE AUTHOR**

Rodney B. Pierce has worked as a fisheries research biologist at the Minnesota Department of Natural Resources in Grand Rapids, Minnesota, for more than twenty-five years, specializing in northern pike biology and management.

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### FOR MORE INFORMATION

For more information, including the table of contents, visit the book's webpage: <a href="http://www.upress.umn.edu/book-division/books/northern-pike">http://www.upress.umn.edu/book-division/books/northern-pike</a>

### The potential loss of a pristine lake in Newfoundland – Sandy Pond.

#### By R. John Gibson

The Sandy Pond Allaince for the Protection of Canadian waters. St. John's, NL

The Canadian federal government, in two recent budget bills, has dismantled some of Canada's most important and long-standing environmental laws. In recent amendments to the Fisheries Act, deleterious substances can now be discharged into pristine waters, in essence negating the conservation aspects of the Fisheries Act, i.e. the intent for which it was created. The new Act allows designation of natural water bodies as toxic tailings impoundments (TIA) by cabinet decisions.

Because these would be cabinet decisions, there would be no access to information about how decisions were evaluated or made. The legislative perspective is that there is nothing unique about individual lakes and that they can be replaced with something else through compensation. If it is legal to do this, the flood gates are open to destruction of pristine waters across the country.

The Sandy Pond Alliance (www.sandypondalliance.org) are taking the federal government to court over the legality of these amendments. The hearing was held on February 27 - 28 in the Newfoundland Supreme Court. Our court case was stimulated by the potential loss of Sandy Pond. Under the amended Fisheries Act a Brazilian mining company, Vale, has been given permission to use Sandy Pond as a TIA for disposal of its toxic wastes. Sandy Pond is an isolated post-glacial lake with three fish species, brook trout, smelt and eel. The brook trout are piscivorous on the dwarf smelt, and are probably the largest brook



Brook trout, Salvelinus fontinalis

trout on the island, growing up to 3 to 5 lbs. They have a deeper body morphology than 'normal' trout, and are likely to be a subspecies. No robust estimates were made of fish populations or productivity of the lake.

The proponent made errors in the calculation of lost fish habitat, for which the main 'compensation' is removal of a partial vegetation barrier on the outlet of a lake in another system. The upcoming court case will be important in conserving natural waters across the country.

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